Atty. Dkt. No. 017348-0361

IN THE CLAIMS:

1. (Currently Amended) A method for immunoassay with a magnetic material ~~labelled~~ and a Superconducting Quantum Interference Device which comprises the following process:

(1) preparing an analyte ~~to detect an antigen-antibody reaction is labelled~~ labeled with said magnetic material label by an antigen-antibody reaction,

(2) magnetizing the magnetic material label ~~is magnetized~~ on the analyte by a magnetic field thereby forming a magnetized magnetic material labeled analyte, and

(3) ~~the magnetic material label magnetized by the magnetic field is detected by~~ detecting the magnetized magnetic material labeled analyte by the Superconducting Quantum Interference Device which detects a variation of a strength of a the magnetic field which is at a right angle to the magnetic field which magnetizes the magnetic material label.

2. (Currently Amended) A method mentioned in claim 1, wherein said magnetic field used to magnetize the magnetic material label used in step (2) is a static magnetic field.

3. (Amended) A method mentioned in claim 1, wherein said Superconducting Quantum Interference Device detects variations of the strength of the magnetic field which occurs by moving ~~the analyte labeled by~~ the magnetized magnetic material ~~label~~ labeled analyte through the magnetic field used to magnetize the magnetic material label.

4. (Previously Amended) A method mentioned in claim 1, wherein the analyte moves parallel to the magnetic field which magnetizes the magnetic material label.

5-11 (Cancelled).

12. (Currently Amended) A method for immunoassay using a magnetic material label and a Superconducting Quantum Interference Device comprising the steps of:

(a) ~~labeling~~ preparing an analyte labeled with ~~a~~ said magnetic material label by an antigen-antibody reaction,

(b) magnetizing said magnetic material label on the analyte by ~~applying a~~ first magnetic field along a first direction thereby forming a magnetized magnetic material labeled analyte, and

(c) using said Superconducting Quantum Interference Device, detecting a variation of strength along a second direction perpendicular to said first direction of a second magnetic field ~~from said~~ caused by moving said magnetized magnetic material ~~label~~labeled analyte through the first magnetic field ~~along a second direction perpendicular to said first direction~~.

13. (Currently Amended) The method as recited in claim 12 wherein said first magnetic field along said first direction is a static magnetic field.

14. (Currently Amended) The method as recited in claim 12 wherein step (c) is performed while moving said ~~labeled and magnetized~~ magnetic material ~~label~~labeled analyte through said first magnetic field.

15. (Currently Amended) The method as recited in claim 14 wherein said step of moving is performed by moving said ~~labeled and~~ magnetized magnetic material labeled analyte in a direction parallel to said first direction.